Medical Services for Indigents (MSI)
Medical & Institutional Health Services

PRO PHARMA
PHARMACEUTICAL CONSULTANTS, INC.

PHYSICIANS EDUCATION GRAM©

February 2007

Treatment Options in Acute Pain

Use short-acting, short-duration analgesics to treat acute pain. Short-acting analgesics are only effective for acute pain. They are not useful for treating chronic pain since they will not provide long-lasting analgesia.

Somatic Pain Treatment	Visceral Pain Treatment	Neuropathic Pain Treatment
• Acetaminophen • Cold Packs • Corticosteroids • Local Anesthetic • NSAIDs • Opioids • Tactile Stimulation	• Corticosteroids • Intraspinal Local Anesthetic Agents • NSAIDs • Opioids	• Anticonvulsants • Corticosteroids • Neural Blockade • NSAIDs • Opioids • Tricyclic Antidepressants

Institute for Clinical Systems Improvement (ICSI). Assessment and Management of Acute Pain. March 2006. p 67

Summary Points Regarding Major Drug Classes

Analgesic Class	Dosage		Comment
Acetaminophen	15-20mg/kg Q4-6h; Max 4g/day		Underused for acute pain; Minimal side effect profile
Aspirin	325-650mg Q4-6h up to 4g/day		
NSAIDs	Ibuprofen:	200-400mg Q4-6h ; max 1.2g/day	400mg safest, inexpensive choice; No evidence that any one NSAID is more effective than another; Can decrease GI disturbances with misoprostol 800mcg, H2 blockers, and PPIs
	Naproxen:	250mg Q6-8h; max 1250 mg/day	
Opioids	No ceiling dose; greater analgesia can be obtained by increasing the dosage with no limit except those imposed by side effects		Recommended: Oxycodone, Hydrocodone Not Recommended for acute pain: Codeine, Propoxyphene, Pentazocine
Tramadol (Ultram)	50-100mg Q4-6h (max 400mg/day)		Can cause serious neurrotoxicity in quantities just 5x the usual dose
COX-2 Inhibitor {Celebrex (Celecoxib)}	200mg BID		Black Box Warning: associated with an increased risk of adverse cardiovascular events

Recommendation:

1. Acetaminophen in doses up to 1,000 mg is the initial choice for most mild to moderate acute pain
2. The first-line NSAID for safety, efficacy, and cost is ibuprofen in doses of 400mg
3. For moderate to severe pain, consider narcotic acetaminophen or narcotic ibuprofen combination
4. Opiates
   a. No evidence to support the fact that other narcotics have greater efficacy or fewer side effects than morphine (Duramorph).
   b. Hydrocodone generally is considered the most potent oral narcotic analgesic that does not require specialized prescribing documentation.
   c. There is no evidence comparing hydrocodone with any other oral narcotic
5. Tramadol has inferior efficacy and no clear benefit regarding safety compared with other alternatives; it should not be a first-line oral analgesic.
6. Tramadol, propoxyphene, and codeine provide inferior analgesia to other recommended agents.

References:

Lexi-complete drug database (www.lexi.com)
Sachs, Carolyn. Oral Analgesics for Acute Nonspecific Pain. American Family Physician. March 2005, Volume71:5.
Merck manuals Online Medical Library. www.merck.com/mmpe/index.html
Institute for Clinical Systems Improvement (ICSI). Assessment and Management of Acute Pain. 2006 March

Pro Pharma Pharmaceutical Consultants, Inc. is not affiliated with any Health Plan, Pharmacy Benefit Management (PBM) Company, or Pharmaceutical Manufacturer. This general information is provided purely for your use and is not slanted toward any product or company.

For comments or questions: Call Craig Stern, PharmD, MSI Pharmacy Benefit Consultant, toll free at (888) 701-5438 or e-mail: craig.stern@propharmaconsultants.com.